

Amendments to the Claims

This Listing of Claims will replace all prior versions and listings of claims in the application:

1 - 18. (Canceled)

19. (Currently Amended) A stable anode for use in an electrolytic aluminum production cell, the stable anode comprising a monolithic body entirely composed of Fe_3O_4 and FeO containing at least 80 wt % iron oxides, the iron oxides selected from the group consisting of Fe_3O_4 , Fe_2O_3 , FeO and mixtures thereof, where at lease one of Fe_3O_4 and Fe_2O_3 is present, and where the anode may optionally contain additive.

20 - 24. (Cancelled)

25. (Previously Presented) The stable anode of Claim 19, wherein the anode has a surface coated with the iron oxide.

26. (Original) The stable anode of Claim 19, wherein the anode remains stable in a molten bath of an electrolytic aluminum production cell at a temperature of up to 960°C .

27. - 32. (Cancelled)

33. (Currently Amended) The stable anode of Claim 3219, wherein the stable anode comprises up to 10 wt % of an additive, wherein the additive is an oxide of one of Al, Si, and Mg.

34. (Cancelled)

35. (Currently Amended) The stable anode of Claim 3419, wherein the stable anode comprises up to 5 wt % of an additive, wherein the additive is an oxide of one of Al, Si, and Mg.

36. (Previously Presented) An electrolytic aluminum production cell including a plurality of the stable anodes of Claim 19.

37. (Previously Presented) The electrolytic aluminum production cell of Claim 36, wherein the electrolytic aluminum production cell contains a cryolite bath and wherein the electrolytic cell is operable to produce commercial purity aluminum utilizing the plurality of stable anodes, wherein the commercial purity aluminum contains a maximum of 0.5 weight percent iron.

38. (Previously Presented) The electrolytic aluminum production cell of Claim 37, wherein the electrolytic aluminum production cell is operable at temperatures of from about 850°C to about 920°C to produce the commercial purity aluminum.

39. (Previously Presented) The electrolytic aluminum production cell of Claim 38, wherein the commercial purity aluminum contains a maximum of 0.034 weight percent Ni, a maximum of 0.034 weight percent Cu, and a maximum of 0.15 weight percent Si.

40. (New) A stable anode for use in an electrolytic aluminum production cell, the stable anode comprising a monolithic body entirely composed of Fe_2O_3 and FeO .

41. (New) The stable anode of Claim 40, wherein the anode has a surface coated with the iron oxide.

42. (New) The stable anode of Claim 40, wherein the anode remains stable in a molten bath of an electrolytic aluminum production cell at a temperature of up to 960°C .

43. (New) The stable anode of Claim 40, wherein the stable anode comprises up to 10 wt % of an additive, wherein the additive is an oxide of one of Al, Si, and Mg.

44. (New) The stable anode of Claim 40, wherein the stable anode comprises up to 5 wt % of an additive, wherein the additive is an oxide of one of Al, Si, and Mg.

45. (New) An electrolytic aluminum production cell including a plurality of the stable anodes of Claim 40.

46. (New) The electrolytic aluminum production cell of Claim 45, wherein the electrolytic aluminum production cell contains a cryolite bath and wherein the electrolytic cell is operable to produce commercial purity aluminum utilizing the plurality of stable anodes, wherein the commercial purity aluminum contains a maximum of 0.5 weight percent iron.

47. (New) The electrolytic aluminum production cell of Claim 46, wherein the electrolytic aluminum production cell is operable at temperatures of from about 850°C to about 920°C to produce the commercial purity aluminum.

48. (New) The electrolytic aluminum production cell of Claim 47, wherein the commercial purity aluminum contains a maximum of 0.034 weight percent Ni, a maximum of 0.034 weight percent Cu, and a maximum of 0.15 weight percent Si.